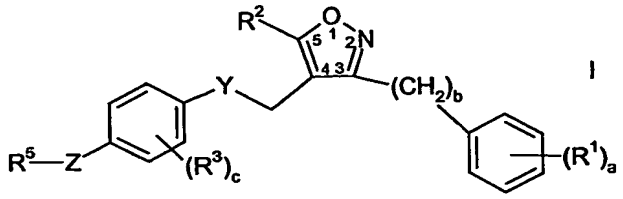
CLAIMS

That Which Is Claimed Is:

1. A compound of formula (I):



I

wherein:

a is 1-5;

each R^1 is the same or different and is independently selected from the group consisting of halo, alkyl, alkenyl, $-OR^6$, $-S(O)_fR^6$, $-NR^6R^7$, $-R^4OR^6$, $-R^4S(O)_fR^6$, $-R^4NR^6R^7$ and cyano;

b is 0-3;

R^2 is selected from the group consisting of alkyl, alkenyl, C_{3-6}cycloalkyl, C_{3-6}cycloalkenyl, $-OR^6$, $-NR^6R^7$, $-R^4OR^6$, $-R^4NR^6R^7$, cyano and nitro;

Y is $-O-$ or $-N(R^8)-$;

c is 0-4;

each R^3 is the same or different and is independently selected from the group consisting of halo, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, $-OR^6$, $-COR^6$, $-CO_2R^6$, $-CH(R^6)OR^7$, $-S(O)_fR^6$, $-NR^6R^7$, $-R^4$cycloalkyl, $-R^4OR^6$, $-R^4COR^6$, $-R^4CO_2R^6$, $-R^4S(O)_fR^6$, $-R^4NR^6R^7$ and cyano

Z is selected from the group consisting of $-O-R^4-$, $-R^4-O-$, $-S(O)_f-R^4-$, $-R^4-S(O)_f-$, $-N(R^8)-R^4-$, $-R^4-N(R^8)-$, $-C(O)N(R^8)-$, $-C(O)R^4N(R^8)-$, $-S(O)_fN(R^8)-$ and $-S(O)_fR^4N(R^8)-$;

each R^4 is the same or different and is independently selected from the group consisting of alkylene and alkenylene;

R^5 is selected from the group consisting of R^6O-, R^6O_2C-, and

wherein Ring A is aryl or a 5-12 membered heterocycle or heteroaryl;

d is 0-4;

each R^9 is the same or different and is independently selected from the group consisting of halo, alkyl, alkenyl, alkynyl, cycloalkyl, $-OR^6$, $-COR^6$, $-CO_2R^6$, $-CH(R^6)OR^7$, $-S(O)_fR^6$, $-NR^6R^7$, $-R^4$cycloalkyl, $-R^4OR^6$, $-R^4COR^6$, $-R^4CO_2R^6$, $-R^4S(O)_fR^6$, $-R^4NR^6R^7$, cyano, 5-9 membered heterocycle and 5-9 membered heteroaryl;

each R^6 and R^7 are the same or different and are each independently selected from the group consisting of H, alkyl, alkenyl, C_{3-6}cycloalkyl and C_{3-6}cycolalkenyl;

R^8 is H or alkyl; and

each f is the same or different and is independently selected from the group consisting of 0, 1 and 2;

or a pharmaceutically acceptable salt, solvate or physiologically functional derivative thereof.

2. The compound according to claim 1 wherein a is 1-2.

3. The compound according to any of claims 1-2 wherein each R^1 is the same or different and is independently selected from the group consisting of halo and $-OR^6$.

4. The compound according to any of claims 1-3 wherein b is 0 or 1.

5. The compound according to any of claims 1-4 wherein R^2 is selected from the group consisting of alkyl and C_{3-6}cycloalkyl.

6. The compound according to any of claims 1-5 wherein Y is -O-.

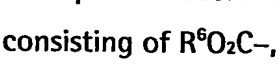
7. The compound according to any of claims 1-6, wherein c is 0-2.

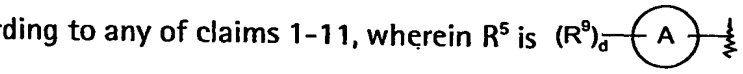
8. The compound according to any of claims 1-7, wherein each R^3 is the same or different and is independently selected from the group consisting of halo and alkyl.

9. The compound according to any of claims 1-8, wherein Z is selected from the group consisting of $-O-R^4-$, $-R^4-O-$, $-S(O)_f-R^4-$, $-N(R^8)-R^4-$, $-R^4-N(R^8)-$, $-C(O)N(R^8)-$,

$-C(O)R^4N(R^8)-$, $-S(O)_fN(R^8)-$ and $-S(O)_fR^4N(R^8)-$.

10. The compound according to any of claims 1-9, wherein R^8 is H or methyl.

11. The compound according to any of claims 1-10, wherein R^5 is selected from the group consisting of R^6O_2C-, and  .

12. The compound according to any of claims 1-11, wherein R^5 is  and Ring A is phenyl or furan.

13. A pharmaceutical composition comprising a compound according to any of claims 1-12.

14. The pharmaceutical composition according to claim 13, further comprising a pharmaceutically acceptable carrier or diluent.

15. A method for the treatment or prophylaxis of a condition mediated by FXR in a subject, said method comprising administering to said subject a therapeutically effective amount of a compound according to any of claims 1-12.

16. A method for the treatment or prophylaxis of cardiovascular disease in a subject, said method comprising administering to said subject a therapeutically effective amount of a compound according to any of claims 1-12.

17. The method according to claim 16, wherein said cardiovascular disease is selected from atherosclerosis and hypercholesterolemia.

18. A method for the treatment or prophylaxis of cholestatic liver disease in a subject comprising administering a therapeutically effective amount of a compound according to any of claims 1-12.

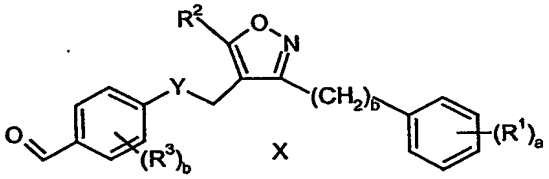
19. A method for the treatment or prophylaxis of organ fibrosis in a subject comprising administering a therapeutically effective amount of a compound according to any of claims 1-12.

20. A method for increasing HDL cholesterol in a subject, said method comprising administering a therapeutically effective amount of a compound according to any of claims 1-12.

21. A method for lowering triglycerides in a subject, said method comprising administering a therapeutically effective amount of a compound according to any of claims 1-12.

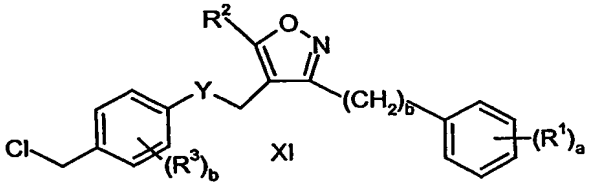
22. A process for preparing a compound according to any of claims 1-12, said process comprising the steps of:

a) reducing a compound of formula (X):



X

followed by chorination to prepare a compound of formula (XI):



XI

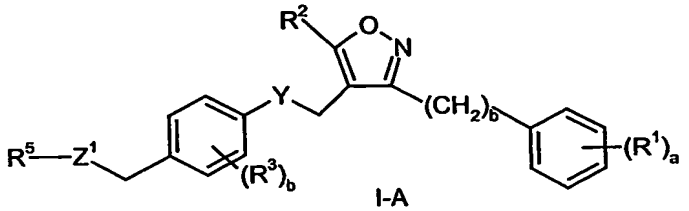
and

b) reacting the compound of formula (XI) with a compound of formula (XII):

$$R^5—Z^1 \quad XII$$

wherein Z^1 is -O-, -S(O)$_f$- or -N(R^8)-;

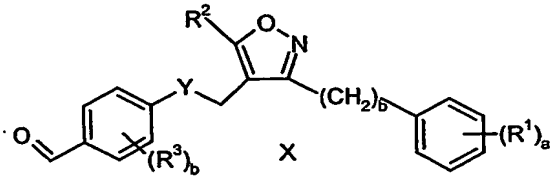
to prepare a compound of formula (I-A):



I-A

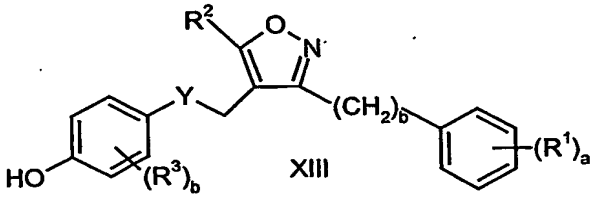
23. A process for preparing a compound according to any of claims 1-12, said process comprising the steps of:

a) rearranging the carbonyl functionality of the compound of formula (X):



X

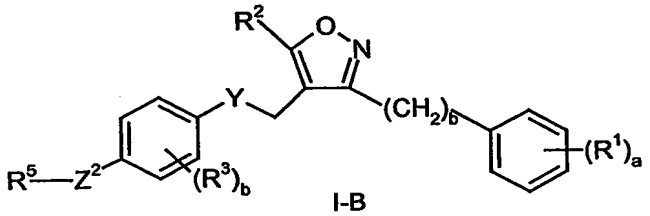
followed by hydrolysis to prepare a compound of formula (XIII):



XIII

and

b) reacting the compound of formula (XIII) with a suitable electrophile to prepare a compound of formula (I-B):

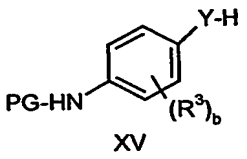


I-B

wherein Z^2 is $-R^4-O-$.

24. A process for preparing a compound according to any of claims 1-12, said process comprising the steps of:

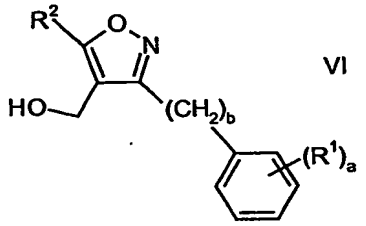
a) reacting a protected compound of formula (XV):



XV

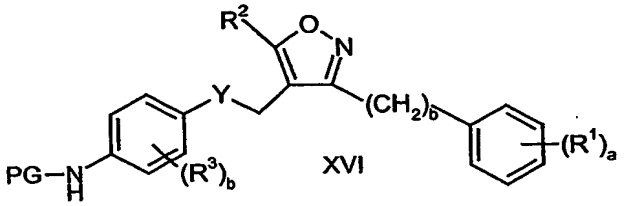
wherein PG is a protecting group;

with a compound of formula (VI):



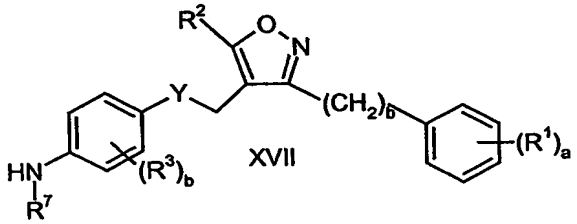
VI

to prepare a compound of formula (XVI):



XVI

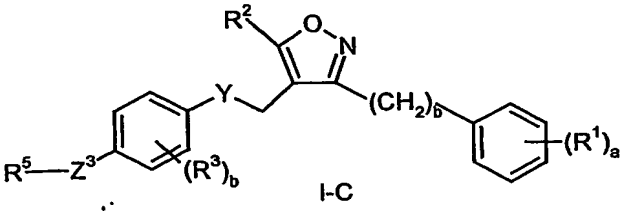
b) optionally alkylating the compound of formula (XVI), followed by deprotecting the compound of formula (XVI) to prepare a compound of formula (XVII):



XVII

and

c) reacting the compound of formula (XVII) with a suitable electrophile to prepare a compound of formula (I-C):



I-C

wherein Z^3 is selected from the group consisting of $-R^4-O-$, $-R^4-S(O)_f-$, $-R^4-N(R^8)-$, $-CON(R^8)-$, $-C(O)R^4N(R^8)-$, $-S(O)_fN(R^8)-$ and $-S(O)_fR^4N(R^8)-$.

25. A compound according to any of claims 1-12 for use in therapy.

26. A compound according to any of claims 1-12 for use in the treatment or prophylaxis of a condition mediated by FXR in a subject.

27. A compound according to any of claims 1-12 for use in the treatment or prophylaxis of cardiovascular disease in a subject.

28. A compound according to any of claims 1-12 for use in the treatment or prophylaxis of atherosclerosis or hypercholesterolemia in a subject.

29. A compound according to any of claims 1-12 for use in the treatment or prophylaxis of cholestatic liver disease in a subject.

30. A compound according to any of claims 1-12 for use in the treatment or prophylaxis of organ fibrosis in a subject.

31. A compound according to any of claims 1-12 for use in increasing HDL cholesterol in a subject.

32. A compound according to any of claims 1-12 for use in lowering triglycerides in a subject.

33. Use of a compound according to any of claims 1-12 for the preparation of a medicament for the treatment or prophylaxis of a condition mediated by FXR in a subject.

34. Use of a compound according to any of claims 1-12 for the preparation of a medicament for the treatment or prophylaxis of cardiovascular disease in a subject.

35. Use of a compound according to any of claims 1-12 for the preparation of a medicament for the treatment or prophylaxis of atherosclerosis or hypercholesterolemia in a subject.

36. Use of a compound according to any of claims 1-12 for the preparation of a medicament for the treatment or prophylaxis of cholestatic liver disease in a subject.

37. Use of a compound according to any of claims 1-12 for the preparation of a medicament for the treatment or prophylaxis of organ fibrosis in a subject.

38. Use of a compound according to any of claims 1-12 for the preparation of a medicament for increasing HDL cholesterol in a subject.

39. Use of a compound according to any of claims 1-12 for the preparation of a medicament for lowering triglycerides in a subject.

40. A pharmaceutical composition comprising a compound according to any of claims 1-12 for use in the treatment or prophylaxis of a condition mediated by FXR.